ABSTRACT OF THE DISCLOSURE

A transmission method and a base transceiver station applying antenna hopping between at least two antenna elements are provided. According to one embodiment of the invention, a carrier carrying a first signal and a second signal is transmitted. At least a portion of the first signal is subjected to a measurement for adjusting receive characteristics of a mobile station for the reception of at least a portion of the second signal. Antenna hopping is applied to the carrier such that the at least a portion of the first signal and the at least a portion of the second signal are transmitted during an interval between two consecutive antenna hops between the at least two antenna elements.